WHAT IS CLAIMED IS:

1. A channel identifier assigning method of assigning channel identifiers to sectors in a mobile communications system which allows a mobile station communicating with a plurality of base stations to decide sectors the mobile station waits for or communicates with, by using grouped channel identifiers sent from the sectors to the mobile station, said channel identifier assigning method comprising the step of:

assigning channel identifiers belonging to a same group to the sectors in a same base station.

2. The channel identifier assigning method as claimed in claim 1, further comprising the step of:

assigning contiguous base stations channel identifiers belonging to other groups.

3. A mobile communications system comprising: a mobile station that communicates with a plurality of base stations, and decides sectors the mobile station waits for or communicates with by using grouped channel identifiers sent from sectors to the mobile station,

wherein said mobile communications system assigns channel identifiers belonging to a same group to the sectors in a same base station.

4. The mobile communications system as claimed in claim 3, wherein said mobile communications system assigns contiguous base stations channel identifiers belonging to other groups.

5. A base station in a mobile communications system allowing a mobile station communicating with a plurality of base stations to decide sectors the mobile station waits for or communicates with, by using a perch channel signal including group channel identifiers and sent from sectors to the mobile station,

wherein said base station assigns its sectors channel identifiers belonging to a same group.

6. The base station as claimed in claim 5, wherein said mobile communications system assigns contiguous base stations channel identifiers belonging to other groups.

7. A method of searching for a neighboring cell utilizing information sent from sectors to a mobile station in a mobile communications system allowing the mobile station communicating with a plurality of base stations to decide a sector the mobile station waits for or communicates with, by using grouped channel

identifiers sent from sectors to the mobile station, said method comprising the steps of:

assigning channel identifiers belonging to a same group to the sectors within a same base station; and

sending from a base station to a visiting mobile station a notification of any one of channel identifiers assigned to sectors of one of neighboring base stations, and/or a notification of a group number to which the channel identifiers belong.

8. The method of searching for a neighboring cell as claimed in claim 7, wherein the channel identifier notified in the step of sending a notification is a channel identifier of a sector which belongs to the neighboring base station and to which the greatest number of the mobile stations make handover from a current sector.

9. A method of searching for a neighboring cell in a mobile communications system allowing the mobile station communicating with a plurality of base stations to decide a sector the mobile station waits for or communicates with, by using grouped channel identifiers sent from sectors to the mobile station, said method comprising the steps of:

assigning channel identifiers belonging to a same group to the sectors within a same base station; and

searching for other channel identifiers in the same group as the channel identifier of a sector already captured by the mobile station, first.

10. A mobile communications system allowing the mobile station communicating with a plurality of base stations to decide a sector the mobile station waits for or communicates with, by using grouped channel identifiers sent from sectors to the mobile station, said mobile communications system comprising:

means for assigning channel identifiers belonging to a same group to the sectors within a same base station; and

means for sending from a base station to a visiting mobile station a notification of any one of channel identifiers assigned to sectors of one of neighboring base stations, and/or a notification of a group number to which the channel identifiers belong.

11. The mobile communications system as claimed in claim 10, wherein the channel identifier notified by said means for sending a notification is a channel identifier of a sector which belongs to the neighboring base station and to which the greatest number of the mobile stations make handover from a current sector.

12. A mobile communications system allowing the mobile station communicating with a plurality of base stations to decide a sector the mobile station waits for or communicates with, by using grouped channel identifiers sent from sectors to the mobile station, said mobile communications system comprising:

means for assigning channel identifiers belonging to a same group to the sectors within a same base station; and

means for searching for other channel identifiers in the same group as the channel identifier of a sector already-captured by the mobile station, first.

13. A base station in a mobile communications system allowing the mobile station communicating with a plurality of base stations to decide a sector the mobile station waits for or communicates with, by using grouped channel identifiers sent from sectors to the mobile station, said base station comprising:

means for assigning channel identifiers belonging to a same group to the sectors within a same base station; and

means for sending from the base station to a visiting mobile station a notification of any one of channel identifiers assigned to sectors of one of neighboring base stations, and/or a notification of a group number to which the channel identifiers belong.

14. The base station as claimed in claim 13, wherein the channel identifier notified by said means for sending a notification is a channel identifier of a sector which belongs to the neighboring base station and to which the greatest number of the mobile stations make handover from a current sector.

15. A mobile station of the mobile communications system as defined in ~~any one of claims 3, 4 and 10-12,~~ claim 3 said mobile station comprising:

means for recording the group of the channel identifier;

means for receiving the channel identifier from the base station; and

means for searching for other channel identifiers in a same group as the channel identifier received by said receiving means belongs to, first.

16. A channel identifier assigning method of assigning channel identifiers to sectors in a mobile communications system which allows a mobile station communicating with a plurality of base stations to decide sectors the mobile station waits for or communicates with, by using channel identifiers sent from the sectors to the mobile station, said channel identifier assigning method comprising the steps of:

predetermining mapping patterns that bring sector numbers of the sectors into correspondence with channel identifier numbers of the channel identifiers such that each channel identifier belongs to only one of the mapping patterns; and

assigning the channel identifiers by selecting one of the mapping patterns for each base station, and by assigning the channel identifiers to the sectors of the base station according to the selected mapping pattern.

17. The channel identifier assigning method as claimed in claim 16, wherein the step of assigning channel identifier uses different mapping patterns for the base stations contiguous to each other.

18. A mobile communications system which allows a mobile station communicating with a plurality of base stations to decide sectors the mobile station waits for or communicates with, by using channel identifiers sent from sectors to the mobile station, said mobile communications system comprising:

means for predetermining mapping patterns that bring sector numbers of the sectors into correspondence with channel identifier numbers of the channel identifiers such that each channel identifier belongs to only one of the mapping patterns; and

means for assigning the channel identifiers by selecting one of the mapping patterns for each base station, and by assigning the channel identifiers to the sectors of the base station according to the selected mapping pattern.

19. The mobile communications system as claimed in claim 18, wherein said means for assigning channel identifier uses different mapping patterns for the base stations contiguous to each other.

20. A base station of a mobile communications system which allows a mobile station communicating with a plurality of base stations to decide sectors the mobile station waits for or communicates with, by using channel identifiers sent from sectors to the mobile station, said base station comprising:

means for predetermining mapping patterns that bring sector numbers of the sectors into correspondence with channel identifier numbers of the channel identifiers such that each channel identifier belongs to only one of the mapping patterns; and

means for assigning the channel identifiers by selecting one of the mapping patterns for each base station, and by assigning the channel identifiers to the sectors of the base station according to the selected mapping pattern.

21. The base station as claimed in claim 20, wherein said means for assigning channel identifier uses different mapping patterns for the base stations contiguous to each other.

22. A method of searching for a neighboring cell utilizing information sent from sectors to a mobile station in a mobile communications system allowing the mobile station communicating with a plurality of base stations to decide a sector the mobile station waits for or communicates with, by using channel identifiers sent from sectors to the mobile station, said method comprising the steps of:

predetermining mapping patterns that bring sector numbers of the sectors into correspondence with channel identifier numbers of the channel identifiers such that each channel identifier belongs to only one of the mapping patterns;

assigning the channel identifiers by selecting one of the mapping patterns for each base station, and by assigning the channel identifiers to the sectors of the base station according to the selected mapping pattern; and

sending from the base station to a visiting mobile station a notification of any one of channel identifiers assigned to sectors of one of neighboring

base stations.

23. The method of searching for a neighboring cell as claimed in claim 22, wherein the channel identifier notified in the step of sending a notification is a channel identifier of a sector which belongs to the neighboring base station and to which the greatest number of the mobile stations make handover from a current sector.

24. The method of searching for a neighboring cell as claimed in claim 22, wherein information notified in the step of sending a notification includes the sector numbers of the sectors of the neighboring base station and/or a mapping pattern number of the mapping pattern to which the channel identifier number belongs.

25. A method of searching for a neighboring cell utilizing information sent from sectors to a mobile station in a mobile communications system allowing the mobile station communicating with a plurality of base stations to decide a sector the mobile station waits for or communicates with, by using channel identifiers sent from sectors to the mobile station, said method comprising the steps of:

predetermining mapping patterns that bring sector numbers of the sectors into correspondence with

channel identifier numbers of the channel identifiers such that each channel identifier belongs to only one of the mapping patterns;

assigning the channel identifiers by selecting one of the mapping patterns for each base station, and by assigning the channel identifiers to the sectors of the base station according to the selected mapping pattern;

sending from the base station to a visiting mobile station a notification of any one of channel identifiers assigned to sectors of one of neighboring base stations; and

searching for other channel identifiers in the same group as the channel identifier of a sector already-captured by the mobile station, first.

26. A method of searching for a neighboring cell utilizing information sent from sectors to a mobile station in a mobile communications system allowing the mobile station communicating with a plurality of base stations to decide a sector the mobile station waits for or communicates with, by using channel identifiers sent from sectors to the mobile station, said method comprising the steps of:

predetermining mapping patterns that bring sector numbers of the sectors into correspondence with channel identifier numbers of the channel identifiers

such that each channel identifier belongs to only one of the mapping patterns;

assigning the channel identifiers by selecting one of the mapping patterns for each base station, and by assigning the channel identifiers to the sectors of the base station according to the selected mapping pattern;

sending from the base station to a visiting mobile station a notification of any one of channel identifiers assigned to sectors of one of neighboring base stations; and

searching for a channel identifier first with a number contiguous to the channel identifier in a circular pattern in the mapping pattern to which the channel identifier already captured by the mobile station belongs.

27. A mobile communications system that allows the mobile station communicating with a plurality of base stations to decide a sector the mobile station waits for or communicates with, using channel identifiers sent from sectors to the mobile station, and that utilizes information sent from the sectors to the mobile station, said mobile communications system comprising:

means for predetermining mapping patterns that bring sector numbers of the sectors into

correspondence with channel identifier numbers of the channel identifiers such that each channel identifier belongs to only one of the mapping patterns;

means for assigning the channel identifiers by selecting one of the mapping patterns for each base station, and by assigning the channel identifiers to the sectors of the base station according to the selected mapping pattern; and

means for sending from the base station to a visiting mobile station a notification of any one of channel identifiers assigned to sectors of one of neighboring base stations.

28. The mobile communications system as claimed in claim 27, wherein the channel identifier notified by means for sending a notification is a channel identifier of a sector which belongs to the neighboring base station and to which the greatest number of the mobile stations make handover from a current sector.

29. The mobile communications system as claimed in claim 27, wherein information notified by means for sending a notification includes the sector numbers of the sectors of the neighboring base station, and/or a mapping pattern number of the mapping pattern to which the channel identifier number belongs.

30. A mobile communications system that allows the mobile station communicating with a plurality of base stations to decide a sector the mobile station waits for or communicates with, using channel identifiers sent from sectors to the mobile station, and that utilizes information sent from the sectors to the mobile station, said mobile communications system comprising:

means for predetermining mapping patterns that bring sector numbers of the sectors into correspondence with channel identifier numbers of the channel identifiers such that each channel identifier belongs to only one of the mapping patterns;

means for assigning the channel identifiers by selecting one of the mapping patterns for each base station, and by assigning the channel identifiers to the sectors of the base station according to the selected mapping pattern;

means for sending from the base station to a visiting mobile station a notification of any one of channel identifiers assigned to sectors of one of neighboring base stations; and

means for searching for other channel identifiers in the same group as the channel identifier of a sector already-captured by the mobile station, first.

31. A mobile communications system that allows the mobile station communicating with a plurality of base stations to decide a sector the mobile station waits for or communicates with, using channel identifiers sent from sectors to the mobile station, and that utilizes information sent from the sectors to the mobile station, said mobile communications system comprising:

means for predetermining mapping patterns that bring sector numbers of the sectors into correspondence with channel identifier numbers of the channel identifiers such that each channel identifier belongs to only one of the mapping patterns;

means for assigning the channel identifiers by selecting one of the mapping patterns for each base station, and by assigning the channel identifiers to the sectors of the base station according to the selected mapping pattern;

means for sending from the base station to a visiting mobile station a notification of any one of channel identifiers assigned to sectors of one of neighboring base stations; and

means for searching for a channel identifier first with a number contiguous to the channel identifier in a circular pattern in the mapping pattern to which the channel identifier already captured by the mobile station belongs.

32. A base station of a mobile communications system that allows the mobile station communicating with a plurality of base stations to decide a sector the mobile station waits for or communicates with, using channel identifiers sent from sectors to the mobile station, and that utilizes information sent from the sectors to the mobile station, said base station comprising:

means for predetermining mapping patterns that bring sector numbers of the sectors into correspondence with channel identifier numbers of the channel identifiers such that each channel identifier belongs to only one of the mapping patterns;

means for assigning the channel identifiers by selecting one of the mapping patterns for each base station, and by assigning the channel identifiers to the sectors of the base station according to the selected mapping pattern; and

means for sending from the base station to a visiting mobile station a notification of any one of channel identifiers assigned to sectors of one of neighboring base stations.

33. The base station as claimed in claim 32, wherein the channel identifier notified by means for sending a notification is a channel identifier of a sector which

belongs to the neighboring base station and to which the greatest number of the mobile stations make handover from a current sector.

34. The base station as claimed in claim 32, wherein information notified by means for sending a notification includes the sector numbers of the sectors of the neighboring base station, and/or a mapping pattern number of the mapping pattern to which the channel identifier number belongs.

35. A mobile station of the mobile communications system as defined in ~~any one of claims 18, 19 and 27-31~~ Claim 18, said mobile station comprising:

means for recording the mapping pattern;

means for receiving the channel identifier from the base station; and

means for searching for other channel identifiers in a same mapping pattern as the channel identifier received by said receiving means belongs to, first.

36. A mobile station of the mobile communications system as defined in ~~any one of claims 18, 19 and 27-31~~ Claim 18, said mobile station comprising:

means for recording the mapping pattern;

means for receiving the channel identifier from the base station; and

means for searching for a channel identifier first with a number contiguous to the channel identifier in a circular pattern in the mapping pattern to which the channel identifier received by said receiving means belongs.

37. The channel identifier assigning method as claimed in claim 1 ~~or 16~~, wherein the channel identifier consists of a spreading code or a carrier frequency.

38. The mobile communications system as claimed in claim 3, ~~10, 12, 18, 27, 30 or 31~~, wherein the channel identifier consists of a spreading code or a carrier frequency.

39. The method of searching for a neighboring cell as claimed in claim 7, ~~9, 22, 25 or 26~~, wherein the channel identifier consists of a spreading code or a carrier frequency.

40. The base stations as claimed in claim 5, ~~13, 20 or 32~~ wherein the channel identifier consists of a spreading code or a carrier frequency.

41. The mobile station as claimed in claim 15, ~~35 or 36~~, wherein the channel identifier consists of a

spreading code or a carrier frequency.

42. The channel identifier assigning method as claimed in claim 1 ~~or 16~~, wherein the channel identifier is included in a perch channel signal.

43. The mobile communications system as claimed in claim 3, ~~10, 12, 18, 27, 30 or 31~~, wherein the channel identifier is included in a perch channel signal.

44. The method of searching for a neighboring cell as claimed in claim 7, ~~9, 22, 25 or 26~~, wherein the channel identifier is included in a perch channel signal.

45. The base stations as claimed in claim 5, ~~13, 20 or 32~~ wherein the channel identifier is included in a perch channel signal.

46. The mobile station as claimed in claim 15, ~~35 or 36~~, wherein the channel identifier is included in a perch channel signal.